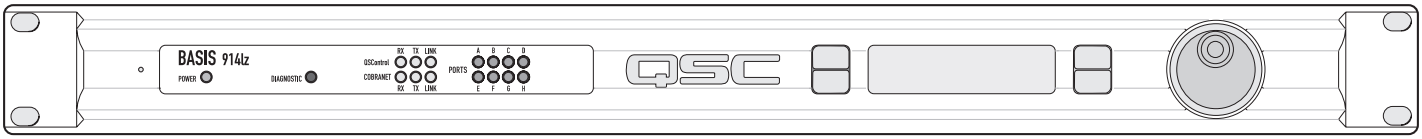
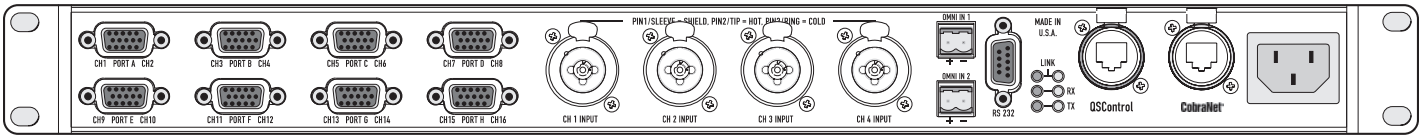
BASIS 914lz

QSControl.net™ Digital System





QSControl.net, QSC's next generation network audio system, achieves the seamless integration of the company's signal transport, control, processing, and monitoring technologies. QSControl.net brings together QSC's digital, power amplification and loudspeaker products into a unified system that enables the user to administrate it all via a fully integrated graphical user interface. The new generation BASIS™ devices are designed to operate under the company's QSControl.net platform.

BASIS 914lz

The BASIS platform meets the control, monitoring, signal transport and processing needs of amplification and loudspeaker systems over an Ethernet network. The BASIS 914lz units combine three distinct QSC technologies within a single hardware unit. Amplifier and loudspeaker control, monitoring and protection, configurable DSP, and CobraNet™ audio transport are seamlessly integrated into one powerful single RU package.

Through QSControl.net, QSC's BASIS and next-generation RAVE and DSP products can be networked together and controlled from a single software interface. In addition, multiple networked computers can be set up to control and monitor all of the units simultaneously.

Fixed Latency DSP

Users of most other configurable DSP systems are familiar with a variable latency inherent in the processing configuration. Add more processing blocks and you also add delay, whether you want it or not. QSC's DSP engine is unique in having a short and fixed processing latency through the DSP subsystem. When the A/D and D/A converters are included, the total analog-to-analog latency of a single unit is a negligible 2.354 milliseconds. QSC's fixed latency DSP is configurable DSP that stays fast and predictable from one configuration to the next.

For more information, visit www.qscontrol.net

Inputs		DSP	Outputs	
Analog	CobraNet		DataPort	CobraNet
4 XLR line level	16 of 32	24 x 24	8(16 channels)	32

Features

- Amplifier and loudspeaker control, monitoring and protection
- Configurable DSP functions and signal paths
- Fixed latency DSP engine
- Ethernet controllable
- CobraNet audio transport with new intuitive GUI
- Two Ethernet ports – CobraNet and control can be run over a single cable or be divided between the two ports. The CobraNet port is 100Base-T. The control port is 10Base-T
- Each unit can store eight design configurations that can be changed on the fly
- Snapshots can recall config or block and/or parameter settings
- THX™ approved for professional cinema applications

DSP functions include, but are not limited to:

- Matrix mixer – any size, up to 24 x 24
- Automixers – gain sharing
- Routers – any size, up to 24 x 24
- Gain controls – any channel count, up to 24
- Graphic equalizers
- Filters – high-pass, low-pass, all-pass, shelf, parametric, parametric shelf, Butterworth high and low-pass, Linkwitz-Riley high and low-pass, Bessel-Thomson high and low-pass
- Crossovers – Linkwitz-Riley, Butterworth, Bessel-Thomson in-phase, Bessel-Thomson symmetrical, 2-way, 3-way, and 4-way general purpose adjustable
- Compressors, peak limiters, AGC's, gates, dynamics processor
- Duckers – up to 8 channels, up to 60 seconds fade in and fade out times, priority mix
- Pink noise, white noise, sine generators
- Delays
- Macros – user-definable custom blocks with password protection

BASIS 914lz

Specifications

PERFORMANCE

	In	Out	Thru
Dynamic Range (AES-17, -60 dB method, all sensitivities)			
Unweighted	> 112 dB	> 112 dB	110 dB
A weighted	> 115 dB	> 115 dB	113 dB
Distortion (20 Hz – 20 kHz, all sensitivities)			
+4 dBu (maximum)	< 0.009% THD+N	< 0.009% THD+N	< 0.009% THD+N
2 dB below clip (maximum)	< 0.009% THD+N	< 0.009% THD+N	< 0.009% THD+N
Crosstalk (20 Hz – 20 kHz)			
Inter-channel (maximum)	> 75 dB		
Inter-channel (typical)	> 90 dB		
Intra-channel (maximum)	> 85 dB		
Intra-channel (typical)	> 100 dB		
Frequency Response			
20 Hz – 20 kHz (maximum)	+/- 0.5 dB		
20 Hz – 20 kHz (typical)	+/- 0.2 dB		
Audio Converters	24 bit, 48 kHz, in and out		
Mute	Infinite attenuation		
Delay	**Standard CobraNet™ latency**		**Low latency**
BASIS™ to Network *Analog input through full DSP chain to CobraNet output*	7.104 milliseconds		4.438 milliseconds
Network to BASIS *CobraNet input through full DSP chain to analog output*	6.313 milliseconds		3.646 milliseconds
BASIS to BASIS *Analog input through full DSP chain, over CobraNet network, through full DSP chain, to analog outputs*	8.083 milliseconds		5.417 milliseconds
BASIS in stand-alone mode *Analog input through full DSP chain to analog outputs*	2.354 milliseconds (default group delay)		

INPUTS/OUTPUTS

Program Inputs	4 inputs
Connector type	XLR/TRS combo
Type	Electrically balanced
Grounding	Shell and shield terminals connected to chassis
Pinout	2-Tip:+ / 3-Ring:- / 1-Sleeve: shield
Input Impedance (nominal)	Balanced: 10k ohms / Unbalanced: 10k ohms
Common-mode Rejection	20 Hz – 20 kHz (minimum): > 54 dB / 20 Hz – 20 kHz (typical): > 60 dB
Input Sensitivities (variable)	Vrms: 1.5, 3, 9, 18 / dBu: 5.7, 11.8, 21.3, 27.3 / dBV: 3.5, 9.5, 19.1, 25.1
Program Outputs	16 outputs
Connector Type	8 HD-15 DataPort connections
Cable Type	QSC DataPort cable, QSC p-n DPC-x ("x" designates cable length in feet)
Available "Stock" Lengths	1, 2, 3, 4, 5, 6, 10, and 20 ft., custom lengths available
Maximum Qualified Length	328 ft. (100 m) using QSC DP cable only / Non QSC cable limited to 6 ft. (audio only)

CONTROL INPUTS/OUTOUTS

Omni Inputs	2 discrete inputs for TTL logic, voltage control or passive resistance
Connector Type	2-pin "phoenix style" (a.k.a. "euro style") detachable terminal blocks
Configuration	Single-ended, ground referenced
Pinout	1:+(Signal) / 2:-(CHASSIS GND)
Normal Operating Range	Reads signals between 0-5 V nominally
Potentiometer Operation	Use 10k ohms for full range
Voltage Tolerance	+/- 48 V
Current Output	0.5 mA with 10k pot (for passive resistive controls)
RS-232 Port	Female DB9 connector (set and diagnostics purposes only)
QSControl Port	Neutrik Ethercon RJ45 ruggedized data connector
CobraNet Port	Neutrik Ethercon RJ45 ruggedized data connector
Indicators	
QSControl Status	Yellow Link, Tx, Rx, front panel / Green Link, Tx, Rx, rear panel
CobraNet Status	Yellow Link, Tx, Rx, front and rear panel
Power	Blue, front panel
Diagnostic	Red, front panel
DataPort Status (port)	Tri-state (red, green, yellow), front panel
LCD Data Display	2 line x 16 character, backlit, front panel

Specifications subject to change without notice.

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